

Title (en)  
Diesel particulate filter apparatus

Title (de)  
Partikelfitereinrichtung eines Dieselmotors

Title (fr)  
Filtre à particules pour moteurs diesel

Publication  
**EP 0742352 A3 19970917 (EN)**

Application  
**EP 96303175 A 19960507**

Priority  
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Abstract (en)  
[origin: EP0742352A2] In a diesel particulate filter apparatus, the surface of the fiber of a ceramic fiber material (5) such as a silicon carbide fiber material is covered with a coating layer (6) made up of a Ba<sub>2</sub>In<sub>2</sub>O<sub>5</sub>, Ba<sub>3</sub>Y<sub>4</sub>O<sub>9</sub> or BaLa<sub>2</sub>O<sub>4</sub> compound having a brownmillerite structure (7) with an NO<sub>x</sub> -reducing action, and a glass layer (8). A filter body (4) is constituted of a nonwoven fabric which comprises the randomly laminated ceramic fiber material (5) with the coating layer (6) on the surface of the fiber thereof. Alternatively, the diesel particulate filter apparatus may be constituted of a filter body (24) made of a nonwoven fabric which comprises a randomly laminated ceramic fiber material (25), and a porous sinter (27) containing the above-mentioned compound, provided that the porous sinter (27) is disposed on the downstream side of the filter body (24).  
<IMAGE>

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IPC 8 full level  
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Citation (search report)  
• [A] EP 0223022 A2 19870527 - MAN TECHNOLOGIE GMBH [DE]  
• [PA] EP 0684062 A1 19951129 - ISUZU CERAMICS RES INST [JP]  
• [A] EP 0467147 A1 19920122 - SCHWAEBISCHE HUETTENWERKE GMBH [DE]  
• [A] US 3849181 A 19741119 - GREEN JAMES RALPH [US], et al  
• [A] DATABASE WPI Section Ch Week 9440, Derwent World Patents Index; Class E12, AN 94-321425, XP002034453  
• [A] PATENT ABSTRACTS OF JAPAN vol. 018, no. 506 (C - 1252) 22 September 1994 (1994-09-22)

Cited by  
FR2832756A1; CN100419227C; EP1580410A4; EP1000653A3; EP1101907A1; EP1176288A3; EP0788828A3; US5728643A; FR2795973A1;  
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